

AMENDMENTS TO THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as is shown below. This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) An air conditioner, comprising:

a compressor;

an accumulator on an inlet side of the compressor;

an outdoor heat exchanger for exchanging heat between refrigerant and exterior air;

at least one indoor unit having an expansion valve and an indoor heat exchanger for exchanging heat between the refrigerant and room air; and

a heater in the accumulator for heating the refrigerant during a room heating mode to delay deposition of frost on the outdoor heat exchanger,

wherein the heater is configured to be operated when the exterior temperature is lower than a reference temperature taken as the exterior temperature at which deposition of frost on the outdoor heat exchanger starts and to be stopped when the exterior temperature exceeds the reference temperature.

2. (Currently Amended) The air conditioner as claimed in claim 1, wherein the heater ~~includes;~~ comprises:

a coil formed heat generating part, and
two electrodes connected to the heat generating part for supplying
power.

3. (Previously Presented) The air conditioner as claimed in claim 2,
wherein the two electrodes are waterproof treated for preventing the two
electrodes from coming into contact with moisture from the outdoor heat
exchanger.

4. (Previously Presented) The air conditioner as claimed in claim 1,
wherein the heater is formed of copper pipe.

5. (Previously Presented) The air conditioner as claimed in claim 1,
wherein the at least one indoor unit comprises a plurality of indoor units.

6. (Currently Amended) A method for controlling operation of an air
conditioner₁ comprising:

heating low temperature refrigerant with a heater in an accumulator during
a room heating mode to delay growth of frost on an outdoor heat exchanger; and
varying a heat generating rate of the heater with an exterior temperature₁

wherein the varying the heat generating rate of the heater by increasing the heat generating rate of the heater when the exterior temperature is lower than a reference temperature taken as the exterior temperature at which deposition of frost on the outdoor heat exchanger starts and by turning off the heater when the exterior temperature exceeds the reference temperature.

7. (Cancelled)

8. (Currently Amended) The method as claimed in claim ~~7~~ 6,

wherein the exterior temperature is divided into a plurality of temperature sections.

9. (Previously Presented) The method as claimed in claim 8,

wherein the heat generating rates of the heater are determined according to respective temperature sections by experiment.

10. (Currently Amended) The method as claimed in claim 6,

wherein the heater ~~includes;~~ comprises:

a coil formed heat generating part, and

two electrodes connected to the heat generating part for supplying power.

11. (Previously Presented) The method as claimed in claim 10, wherein the two electrodes are waterproof treated for preventing the two electrodes from coming into contact with moisture from the outdoor heat exchanger.

12. (Previously Presented) The method as claimed in claim 6, wherein the heater is formed of copper pipe.

13. (Currently Amended) A method for controlling operation of an air conditioner, comprising:
heating low temperature refrigerant with a heater in an accumulator during a room heating mode to delay growth of frost on an outdoor heat exchanger; and
varying a heat generating rate of the heater with a capacity of a plurality of indoor units.

14. (Previously Presented) The method as claimed in claim 13, wherein the varying the heat generating rate of the heater comprises:
increasing the heat generating rate of the heater when the capacity of the indoor unit required in room heating is greater than a reference

capacity taken as the capacity of the indoor unit having the smallest capacity of the indoor units, and

turning off the heater when the capacities of the indoor units are lower than the reference capacity.

15. (Original) The method as claimed in claim 14, wherein the capacity of the indoor unit required in room heating is divided into a plurality of sections.

16. (Previously Presented) The method as claimed in claim 15, wherein the heat generating rates of the heater are determined according to respective sections by experiment.

17. (Currently Amended) The method as claimed in claim 13, wherein the heater ~~includes;~~ comprises:

a coil formed heat generating part, and

two electrodes connected to the heat generating part for supplying power.

18. (Previously Presented) The method as claimed in claim 17,

wherein the two electrodes are waterproof treated for preventing the two electrodes from coming into contact with moisture from the outdoor heat exchanger.

19. (Previously Presented) The method as claimed in claim 13, wherein the heater is formed of copper pipe.

20. (Currently Amended) The method as claimed in claim 13, further comprising:

determining the heat generating rate of the heater ~~is determined~~, taking an exterior temperature into account.

21. (Cancelled)